UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 October 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-35_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-35_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _17 October 2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _10/17/2001_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: _Draft Action_

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "200" has been used to designate both active media package in Figure 2 and an exemplary roll of print media in Figure 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: #214-1 in Figure 2, and #612 in Figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each

drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by

Siwinski et al. (US 2002/0015066), hereafter referred to as Siwinski.

Regarding claim 1, Siwinski teaches a medium comprising an electronic tag fixed

to the medium (Figure 2, medium #24 fixed with electronic tag #54h), the electronic tag

storing information that identifies a corresponding quantity and type of print media

(Page 6, Table 3, showing data stored in electronic tag including medium type and

quantity).

Regarding claim 2, which depends from claim 1, Siwinski further teaches a medium wherein the electronic tag is a radio frequency tag (Paragraph 42, RF transponder is integrally connected to medium).

Regarding claims 3-5, which depend from claim 1, Siwinski further teaches a medium wherein the medium is a sheet in a stack, a sheet in a roll, or a package designed to contain print media (Paragraph 56, scope of disclosure covers paper in roll form, sheet form and the packaging or substrate material itself).

Regarding claim 6, which depends from claim 1, Siwinski further teaches a medium wherein the information further comprises a number of sheets of print media contained in a package of print media or a length of print media in a roll of print media (Paragraph 23, Siwinski teaches measuring and storing consumable levels. Consumables, in this context, include receiver media such as sheet media and roll media, paragraph 33. Information regarding number of sheets of print media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3, Page 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-20, 22-28, 30-32 and 34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Siwinski et al (US 2002/0015066) and Hirano et al. (US 6,246,466)

hereafter referred to as Siwinski and Hirano.

Regarding claim 7, which depends from claim 1, Siwinski teaches a method

fixing an electronic tag onto a package designed to contain a quantity of print media of a

media type (Siwinski, Paragraph 56, fixing tag to packaging) and storing information on

the electronic tag (Siwinski, Page 6, Table 3), the information comprising at least the

media type, such that upon loading at least a portion of the package that comprises the

electronic tag into a media supply of an imaging device, the information is automatically

transferred to the imaging device (Siwinski, paragraph 64, when a media package is

initially loaded in a printer, an initial identification sequence takes place wherein

transponder is read and data is downloaded and stored). Although Siwinski teaches the

general method of fixing of an RF tag to a packaging material and initially identifying the

RF tag when media is loaded, Siwinski does not expressly disclose the configuration of

the packaging of print media. However, Hirano explicitly teaches a method of fixing an

electronic tag onto a package designed to contain a quantity of print media of a media

type (Hirano, col 11, ln 29-34, RF recording label is affixed to sheet containing

container, and col 12, ln 42-48, recording label stores information such as media type

and quantity). The packaging method designed to contain a quantity of print media of a

media type with electronic tag is seen in Figure 13 of Hirano, with sheet container #302

containing sheet "S," with electronic recording label #355 attached to container.

Siwinski and Hirano are combinable because they are from the same field of
endeavor of using radio frequency tags for bidirectional communication of information
regarding print medium type and quantity. At the time of the invention, it would have
been obvious to a person of ordinary skill in the art to combine the explicit packaging
method of Hirano with the packaging method as disclosed by Siwinski comprising a
container with electronic tag with information recorded thereon. The suggestion for
doing so would have been to obviate the need for manual entry of data describing an
inkjet consumable (Siwinski, paragraph 18), and to provide a sheet container lest a user
touches a print media thereby degrading print quality (Hirano, col 2, ln 32-38).
Therefore, it would have been obvious to combine Hirano with Siwinski to obtain the
invention as specified in claim 7.

Regarding claims 8-10, which depend from claim 7, the combination of Siwinski
and Hirano further teach a method of packaging print media wherein the quantity of print
media is a sheet in a stack, a sheet in a roll, or a package designed to contain print
media (Siwinski, paragraph 56, scope of disclosure covers paper in roll form, sheet
form, and the packaging or substrate material itself. Additionally, Hirano teaches a
method wherein the media is a packaging container for the recording medium, col 11, ln
29-41).

Regarding claim 11, which depends from claim 7, the combination of Siwinski
and Hirano further teaches a method wherein the information further comprises a
number of sheets of print media contained in the package or a length of print media that
is contained on the package (Siwinski, paragraph 23, teaches measuring and storing

consumable levels. Consumables, in this context, include receiver media such as sheet media and roll media, paragraph 33. Information regarding number of sheets of print media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3, Page 6. In Hirano, a method is taught wherein the information comprises the kind of sheets, the size of sheets, the number of packed sheets, and the number of sheets remaining in col 12, ln 42-48).

Regarding claim 12, the combination of Siwinski and Hirano further teaches a method to automatically provide print media information to an imaging device (Siwinski, paragraph 64, when a media package is initially loaded in a printer, an initial identification sequence takes place wherein transponder is read and data is downloaded and stored, and in Hirano, col 12 ln 30-41, a constant cycle wave is transmitted by communication module in printer to detect presence of sheets and upon detection, begins exchange of data between electronic recording label and microprocessor), the method comprising:

Detecting, by an imaging device (Hirano, col 12, ln 30-41, communication module for reading data on tag is inside printer), data stored on an electronic tag; and automatically configuring the imaging device based on the data (Hirano, col 12, ln 48-51, printer effects settings of printer settings based on data stored in electronic recording label. See also Siwinski, paragraph 63, where imaging device alters processing of print jobs based upon stored information obtained from RF tags of consumable).

Regarding claim 13, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein the method comprises an electronic tag which is fixed to

a portion of a package that comprises a quantity of print media, the portion being loaded

in a media supply of an imaging device (Hirano, Figure 23, showing sheet containing

container #302 with integrated recording label #355, wherein media supply "S" is loaded

into printer #500).

Regarding claim 14, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein detecting the data is independent of any indicia imprinted

on any particular one of the quantity of print media (Siwinski, paragraph 38, where RF

transceiver operates independently of any other antenna and thus independently of any

other indicia).

Regarding claim 15, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein the data comprises at least a media type that

corresponds to the quantity of print media (Siwinski, page 6, Table 3, quantity of media

is stored in Usage Counter, and additionally, in Hirano, col 12, ln 42-48, quantity of

media is stored in recording label).

Regarding claims 16 and 17, which depend from claim 12, the combination of

Siwinski and Hirano further teaches a method of automatically providing print media

information to an imaging device, wherein the quantity of print media is a stack of print

or a roll of print media (Siwinski, paragraph 56, scope of disclosure covers paper in

stack form or roll form).

Regarding claim 18, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein the electronic tag is a radio frequency tag that is attached

to the package (Siwinski, paragraph 56, RF transponder (see paragraph 42) is attached

to packaging, and Hirano, col 11, ln 29-34, recording label is attached to sheet

containing container).

Regarding claim 19, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein the data further comprises a value that indicates a

number of sheets of print media contained in the package or a length of print media that

is contained on the package (Siwinski, paragraph 23, teaches measuring and storing

consumable levels. Consumables, in this context, include receiver media such as sheet

media and roll media, paragraph 33. Information regarding number of sheets of print

media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3,

Page 6. In Hirano, a method is taught wherein the information comprises the kind of

sheets, the size of sheets, the number of packed sheets, and the number of sheets

remaining in col 12, ln 42-48).

Regarding claim 20, which depends from claim 12, the combination of Siwinski

and Hirano further teaches a method of automatically providing print media information

to an imaging device, wherein the data further comprises a value to indicate a remaining

quantity of print media (Siwinski, paragraph 23, teaches measuring and storing

consumable levels. Consumables, in this context, include receiver media such as sheet

media and roll media, paragraph 33. Information regarding number of sheets of print

media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3,

Page 6. In Hirano, a method is taught wherein the information comprises the kind of

sheets, the size of sheets, the number of packed sheets, and the number of sheets

remaining in col 12, ln 42-48), and, wherein the method further comprises:

Removing at least one portion of the quantity of print media from the package

(Hirano, col 6, ln 59-60, sheet is removed upon print command); and

Responsive to removing the at least one portion, updating the value to reflect a

number of sheets remaining of the quantity of print media or an available length

remaining of the quantity of print media (Hirano, col 12, ln 42-48, a method is taught

wherein the information comprises the kind of sheets, the size of sheets, the number of

packed sheets, and the number of remaining sheets. When a sheet is removed from

the package, i.e. when a page removed from the stack to be printed, the number of total

remaining sheets is updated via bidirectional communication means).

Regarding claim 22, the combination of Siwinski and Hirano further teaches a

computer-readable medium comprising computer-executable instructions (Siwinski,

paragraph 37, states a computer program running on a control console performs the

logic control processing operations of the printer, and also provides operating

instructions to a machine control processor) to automatically provide print media

information to an imaging device, the computer-executable instructions comprising

instructions for:

Detecting data that is stored on an electronic tag (Hirano, col 12, ln 30-41,

communication module for reading data on tag is inside printer), and configuring the

imaging device based on the data (Hirano, col 12, ln 48-51, printer effects settings of

printer settings based on data stored in electronic recording label. See also Siwinski,

paragraph 63, where imaging device alters processing of print jobs based upon stored

information obtained from consumable RF tags).

Regarding claim 23, which depends from claim 22, the combination of Siwinski

and Hirano further teaches a computer-readable medium comprising computer-

executable instructions wherein the electronic tag is fixed to a package, the package

comprising a quantity of print media, the package being loaded in a media supply of an

imaging device (Hirano, Figure 23, showing sheet containing container #302 with

integrated recording label #355, wherein media supply "S" is loaded into printer #500).

Regarding claim 24, which depends from claim 22, the combination of Siwinski

and Hirano further teaches a computer-readable medium comprising computer-

executable instructions wherein detecting the data is independent of any indicia

imprinted on any particular one of the quantity of print media (Siwinski, paragraph 38,

where RF transceiver operates independently of any other antenna and thus

independently of any other indicia).

Regarding claim 25, which depends from claim 22, the combination of Siwinski

and Hirano further teaches a computer-readable medium comprising computer-

executable instructions wherein the data comprises at least a media type that corresponds to the quantity of print media (Siwinski, page 6, Table 3, data in electronic tag comprises Consumable Type code, encoding the type of paper).

Regarding claim 26, which depends from claim 22, the combination of Siwinski and Hirano further teaches a computer-readable medium comprising computer-executable instructions wherein the tag is a radio tag that is attached to the package (Siwinski, paragraph 56, RF transponder (see paragraph 42) is attached to packaging, and Hirano, col 11, ln 29-34, recording label is attached to sheet containing container).

Regarding claim 27, which depends from claim 22, the combination of Siwinski and Hirano further teaches a computer-readable medium comprising computer-executable instructions wherein the data further comprises a value that indicates a number of sheets of print media contained in a package or a length of print media that is contained on the package (Siwinski, paragraph 23, teaches measuring and storing consumable levels. Consumables, in this context, include receiver media such as sheet media and roll media, paragraph 33. Information regarding number of sheets of print media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3, Page 6. In Hirano, a method is taught wherein the information comprises the kind of sheets, the size of sheets, the number of packed sheets, and the number of sheets remaining in col 12, ln 42-48).

Regarding claim 28, which depends from claim 22, the combination of Siwinski and Hirano further teaches a computer-readable medium comprising computer-executable instructions wherein data further comprises a value to indicate a remaining

quantity of print media (Paragraph 23, Siwinski teaches measuring and storing consumable levels. Consumables, in this context, include receiver media such as sheet media and roll media, paragraph 33. Information regarding number of sheets of print media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3, Page 6. In Hirano, a method is taught wherein the information comprises the kind of sheets, the size of sheets, the number of packed sheets, and the number of sheets remaining in col 12, ln 42-48); and,

Wherein the computer-executable instructions further comprise instructions for removing at least one portion of the quantity of print media from a package (Hirano, col 6, ln 59-60, sheet is removed upon print command); and

Responsive to removing the at least one portion, updating the value to reflect a number of sheets remaining of the quantity of print media or an available length remaining of the quantity of print media (Hirano, col 12, ln 42-48, teaches the information comprises the kind of sheets, the size of sheets, the number of packed sheets, and the number of remaining sheets. When a sheet is removed from the package, i.e. when a page removed from the stack to be printed, the number of total remaining sheets is updated via bidirectional communication means).

Regarding claim 30, the combination of Siwinski and Hirano further teaches a method to automatically provide print media information (Siwinski, paragraph 64, when a media package is initially loaded in a printer, an initial identification sequence takes place wherein transponder is read and data is downloaded and stored) to an imaging device, the method comprising:

Loading a plurality of sheets of print media into a feed path of an imaging device, at least one subset of the print media having a particular print media type, the sheets comprising a particular one sheet that comprises an electronic tag, the electronic tag being configured to identify information corresponding to each of the other sheets of print media, the information comprising at least the particular print media type (Siwinski, media has attached RF transponder (paragraph 42) for storing information regarding media type, properties, and amount (page 6, Table 3). A plurality of sheets are loaded into imaging device, with one embodiment having a separate loading sheet wherein the loading sheet includes an attached transponder, paragraph 56);

Generating a signal that results in a transfer of the information to the imaging device (Siwinski, paragraph 48, transceiver in imaging device generates initial RF signal to begin transfer of information from transponder in media);

Receiving the information (Siwinski, paragraph 50, transceiver in imaging device has read and write access to transponder in media); and

Responsive to receiving the information, automatically configuring the imaging device based on the particular media type (Hirano, col 12, ln 48-51, printer effects settings of printer settings based on data stored in electronic recording label. See also Siwinski, paragraph 63, where imaging device alters processing of print jobs based upon stored information obtained from consumable RF tags).

Regarding claim 31, which depends from claim 30, the combination of Siwinski and Hirano further teaches a method to automatically provide print media information to an imaging device comprising wherein the particular one sheet is a media type that is

different than the particular media type of the sheets (Siwinski, paragraph 56, separate

loading sheet is provided with the paper package).

Regarding claim 32, which depends from claim 30, the combination of Siwinski

and Hirano further teaches a method to automatically provide print media information to

an imaging device comprising wherein the electronic tag is a radio frequency tag

(Siwinski, paragraph 42, radio frequency transponder is integrally connected to each

consumable medium).

Regarding claim 34, which depends from claim 30, the combination of Siwinski

and Hirano further teaches a method to automatically provide print media information to

an imaging device comprising wherein the sheets include a top sheet and a bottom

sheet, wherein the particular one sheet is a last sheet that is the bottom sheet (Siwinski,

paragraph 56, sheet with RF tag can be in a stack, with particular tagged sheet as last

sheet), wherein the information further comprises a value that indicates a number of

sheets remaining of the sheets (Siwinski, paragraph 23, teaches measuring and storing

consumable levels. Consumables, in this context, include receiver media such as sheet

media and roll media, paragraph 33. Information regarding number of sheets of print

media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3,

Page 6. In Hirano, a method is taught wherein the information comprises the kind of

sheets, the size of sheets, the number of packed sheets, and the number of sheets

remaining in col 12, ln 42-48), and wherein the method further comprises:

Removing a sheet from the sheets (Hirano, col 6, ln 59-60, when a print

command is inputted, feeding operation is started, thereby removing a sheet from the

stack; and

Wherein generating the signal is performed responsive to removing the sheet

(Hirano, col 12, ln 51-53, each time a sheet is pulled from tray and printed on, imaging

signal is generated by imaging device which stimulates transponder in media to update

information, col 15, ln 10-16).

Claims 21, 29, 33, and 35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Siwinski et al. (US 2002/0015066) and Hirano et al. (US 6,246,466)

as applied to claims 12, 22, and 30, respectively, above, and further in view of Nagaoka

et al. (US 5,096,180), hereafter referred to as Siwinski, Hirano, and Nagaoka.

Regarding claim 21, which depends from claim 12, the combination of Siwinski

and Hirano teaches a method to automatically provide print media information to an

imaging device by detecting, by the imaging device, data stored on an electronic tag

comprising a value that indicates an amount of remaining of the quantity of print media

(Hirano, col 12, ln 42-48, a method is taught wherein the information comprises the kind

of sheets, the size of sheets, the number of packed sheets, and the number of

remaining sheets), and automatically configuring the imaging device based on the data,

as explained above. The combination of Siwinski and Hirano does not teach a method

wherein the method further comprises, responsive to detecting the data, presenting the

amount remaining on a display device for viewing, and/or presenting the value to a

computer program application to determine if there is enough print media to complete a

print job. Nagaoka teaches a method of counting the number of sheets in a tray, and

presenting the number of remaining sheets of print media to a computer to determine if

there is enough media to complete the print job. If there is not enough media available,

an alarm is displayed on the display for corrective action (Nagaoka, figure 11, especially

steps 6 and 7, and additionally col 12, ln 31-63, processing includes determining

remaining amount of media and presents value to CPU for comparing against print job

length, and then data is sent to display).

Siwinski, Hirano, and Nagaoka are combinable because they are from a similar

problem solving area of managing the quantity of paper remaining in an imaging device.

At the time of the invention, it would have been obvious to a person of ordinary skill in

the art to add the presentation method of presenting the amount of media remaining on

a display device for viewing to a computer program to determine if there is enough print

media to complete a print job of Nagaoka to the combination of Siwinski and Hirano

comprising a method of detecting data stored on an electronic tag and configuring the

imaging device based on the data. A problem recognized by Hirano is that in imaging

devices the amount of remaining sheets is unknown to the user, and there can be a

case where the print sheets become exhausted in the course of print output (Hirano, col

1, ln 54-67 and col 2 ln 1-3). Thus, the motivation for combining the paper amount

detection and presentation method would be to prevent a paper supply from being

exhausted and inconveniencing the user. Therefore, it would have been obvious to

combine Nagaoka with the combination of Siwinski and Hirano to obtain the invention

as specified in claim 21.

Regarding claim 29, which depends from claim 22, the combination of Siwinski,

Hirano, and Nagaoka further teach a computer-readable medium recited in claim 22,

wherein the data further comprises a value that indicates an amount remaining of the

quantity of print media (Siwinski, paragraph 23, teaches measuring and storing

consumable levels. Consumables, in this context, include receiver media such as sheet

media and roll media, paragraph 33. Information regarding number of sheets of print

media or length of print media in a roll is stored in the 32-Bit Usage Counter of Table 3,

Page 6. In Hirano, a method is taught wherein the information comprises the kind of

sheets, the size of sheets, the number of packed sheets, and the number of sheets

remaining in col 12, ln 42-48), and

Wherein the computer-executable instructions (Siwinski, paragraph 37, states a

computer program running on a control console performs the logic control processing

operations of the printer, and also provides operating instructions to a machine control

processor) further comprise instructions for:

Responsive to detecting the data, presenting the amount remaining on a display

device for viewing, and/or presenting the value to a computer program application to

determine if there is enough print media to complete a print job (Nagaoka, figure 11,

especially steps 6 and 7, and additionally col 12, ln 31-63, processing includes

determining remaining amount of media and presents value to CPU for comparing

against print job length, and then data is sent to display).

Regarding claim 33, which depends from claim 30, the combination of Siwinski.

Hirano, and Nagaoka further teaches a method to automatically provide print media

information to an imaging device wherein the sheets include a top sheet and a bottom

sheet, wherein the particular one sheet is a first sheet that is the top sheet, and wherein

the method further comprises:

Removing the top sheet from the sheets (Nagaoka, col 8, In 57-59, uppermost

sheet of recording medium is pressed against feed roller, thereby removing top sheet

from the sheets); and

Wherein generating the signal is performed responsive to removing the top sheet

(Hirano, col 12, In 51-53, each time a sheet is pulled from tray and printed on, imaging

signal is generated by imaging device which stimulates transponder in media to update

information, col 15, In 10-16).

Regarding claim 35, which depends from claim 30, the combination of Siwinski,

Hirano, and Nagaoka further teaches a method to automatically provide print media

information to an imaging device wherein the information further comprises a value that

indicates a number of sheets remaining of the sheets (Siwinski, paragraph 23, teaches

measuring and storing consumable levels. Consumables, in this context, include

receiver media such as sheet media and roll media, paragraph 33. Information

regarding number of sheets of print media or length of print media in a roll is stored in

the 32-Bit Usage Counter of Table 3, Page 6. In Hirano, a method is taught wherein the

information comprises the kind of sheets, the size of sheets, the number of packed

sheets, and the number of sheets remaining in col 12, In 42-48); and,

Wherein the method further comprises:

Responsive to receiving the information, presenting the value on a display device
for viewing or presenting the value to a computer program application such that the
value is available to determine if there is enough print media to complete a printing job
(Nagaoka, figure 11, especially steps 6 and 7, and additionally col 12, ln 31-63,
processing includes determining remaining amount of media and presents value to CPU
for comparing against print job length, and then data is sent to display).

Conclusion

The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure. The Vraa et al. reference, US 6,811,079, filed September 18,
2000, is cited for teaching a sheet media package system including a radio-frequency
identification transponder that stores relevant digital data associated with the packaging.
The Spurr et al. reference, US 6,099,178, filed August 12, 1998, is cited for teaching a
printer with media supply spool with integrated radio frequency transponder storing
media type and quantity used for automatic calibration of the imaging device.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-
5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for
the organization where this application or proceeding is assigned is 703-872-9306.

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Business Center (EBC) at 866-217-9197 (toll-free).

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